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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/655,550

09/05/2003

Ronald S. Indeck

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08/11/2004

MILES & STOCKBRIDGE PC
1751 PINNACLE DRIVE
SUITE 500
MCLEAN, VA 22102-3833

EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/655,550	Applicant(s) INDECK, RONALD S.	
	Examiner William J. Klimowicz	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Reissue Applications

The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 251

Claims 1-35 are rejected under 35 U.S.C. 251 as lacking a basis for reissue, since by statute reissue application can only be granted for the unexpired portion of the term of the original patent. See *In re Morgan*, 990F.2d 1230, 26 USPQ2d 1392 (Fed. Cir. 1983), which holds that reissue applications can only be issued for unexpired patents. If the patent term (US Patent No. 6,072,669) , which is the basis for this reissue, was granted as a Patent on June 6, 2000, is currently an expired US Patent) has expired due to nonpayment of maintenance fees, no reissue can be issued. To reinstate the original patent, a petition under 37 CFR 1.377 or 37 CFR 1.378 (to establish payment of maintenance fees) must be filed and granted. See also MPEP § 1415.01

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25, 26 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi et al. (JP 2-46511) in view of Yabuta (JP 5-342528).

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As per claim 25 and as per claim 26, Narumi et al. (JP 2-46511) discloses a magnetic recording head and a corresponding method of producing said magnetic recording head, comprising a magnetic pole structure (5-7) defining a pair of gaps (8, 9) arranged in succession along a predetermined direction (e.g., see FIGS. 1(a) and 1(b)), and a single coil (4) capable of simultaneously magnetically energizing said gaps (8, 9) such that a portion of a recording medium (FIG. 3) moved across said gaps (8, 9) in said predetermined direction is preconditioned by one of said gaps (erasing gap 8) prior to movement across the other of said gaps (recording-reproducing gap 9).

As per claims 32 and 35, wherein the other of said gaps (9) is a write gap (recording-reproducing gap 9).

As per claim 33, wherein the one of said gap is a preconditioning gap (erasing gap 8), the preconditioning gap (erasing gap 8) being wider than the other of said gaps (gap 8) has a width of $0.5\mu\text{m}$; recording-reproducing gap (9) has a width of $0.3\mu\text{m}$ - COL. 7 of Narumi et al. (JP 2-46511); that is alternatively stated, as per claim 34, arranging the pair of gaps such that the one of said gaps (8) is wider than the other of said claps (9).

With regard to claims 25 and 26, however, Narumi et al. (JP 2-46511) does not expressly disclose wherein the single coil is a planar coil.

Yabuta (JP 5-342528), however, teaches that it is well known in the art to provide thin film planar coils in lieu of the coil winding of Narumi et al. (JP 2-46511) in order to eliminate "laborious coil winding." Contrast the coil of the type disclosed by Yabuta (JP 5-342528) in FIG. 2, which equates to the coil winding of Narumi et al. (JP 2-46511). Yabuta (JP 5-342528),

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in order to simplify the manufacturing process and thus eliminate the laborious coil winding, uses thin film photolithographic techniques to form a thin film planar coil as seen in FIG. 1 of Yabuta (JP 5-342528).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of forming a thin film planar coil in lieu of wound coil wires, as expressly suggested by Yabuta (JP 5-342528), to the magnetic head of Narumi et al. (JP 2-46511).

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the teaching of forming a thin film planar coil in lieu of wound coil wires, as expressly suggested by Yabuta (JP 5-342528), to the magnetic head of Narumi et al. (JP 2-46511) in order to in order to simplify the manufacturing process and thus eliminate the laborious coil winding, using thin film photolithographic techniques to form a thin film planar coil as seen in FIG. 1 of Yabuta (JP 5-342528). See abstract of Yabuta (JP 5-342528).

Additionally, with regard to claims 25 and 26, although Narumi et al. (JP 2-46511) as applied to Yabuta (JP 5-342528) does not expressly show a “thin film” magnetic head, Official notice is taken that “thin film” magnetic heads are, ubiquitous and notoriously old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the magnetic head of Narumi et al. (JP 2-46511) as applied to Yabuta (JP 5-342528), as being a “thin film” magnetic head (in lieu of a core structure).

The rationale is as follows: one of ordinary skill in the art would have been motivated to provide the magnetic head of Narumi et al. (JP 2-46511) as applied to Yabuta (JP 5-342528), as

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being a "thin film" magnetic head (in lieu of a core structure) in order to provide mass-producible magnetic heads, which are easily fabricated in a batch manner via conventional thin film photolithographic techniques and increasing head yield and profit margin, as is nearly ubiquitous, well known, appreciated and performed in the art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Schewe (US 4,672,493).

As per claim 27, Schewe (US 4,672,493) discloses a thin film magnetic recording head (FIGS. 1, 2) comprising: a thin film coil (18) arranged to simultaneously magnetically energize a pair of gaps (e.g., see FIG. 2)), the pair of gaps being defined by a thin film magnetic pole structure (FIGS. 1, 2) configured to include, as seen in cross-section relative to a thickness of a substrate (3): a first pole (7) positioned over the substrate (3) with the thin film coil (18) positioned over the first pole (7); a second pole (6) positioned over a first portion (e.g., portion (19)) of the thin film coil (18); and a third pole (5) positioned over the first pole (3), the second pole (6) and a second portion (e.g., 20) of the thin film coil (18).

As per claim 29, wherein the first pole (7), the second pole (6) and the third pole (5) are interconnected.

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As per claim 30, wherein the first pole (7) and the second pole (6) are interconnected through a pole portion (at (16)) extending through a central portion of the thin film coil (18) - see FIG. 1.

As per claim 31, wherein the first pole (7) and the third pole (5) are interconnected so as to form a substantially V-shaped member (adjacent portions (16)) embracing the coil (18).

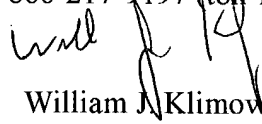
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William J. Klimowicz

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Primary Examiner

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WJK